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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/599,751

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Gianfranco Bedetti

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EXAMINER

PENNY, TABATHA L

ART UNIT

PAPER NUMBER

4171

NOTIFICATION DATE

DELIVERY MODE

09/28/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip@akerman.com

Office Action Summary	Application No. 10/599,751	Applicant(s) BEDETTI, GIANFRANCO	
	Examiner TABATHA PENNY	Art Unit 4171	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 6-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 October 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>07/30/2009, 01/05/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is the first action on the merits.
2. The preliminary amendment on 10/6/2006 has been entered and fully considered.
3. Claims 1-10 are pending. Claims 6-10 are withdrawn from further consideration by the examiner as being drawn to a non-elected invention.

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group 1, claim(s) 1-5, drawn to a fluid bed granulation process.

Group 2, claim(s) 6-10, drawn to a fluid bed granulator.

2. The inventions listed as Groups 1-2 do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The special technical feature is identified as a fluidized bed granulator. **GOLANT et al.** (US Pat. No. 4,532,155) discloses a fluidized bed apparatus for granulating particles.

3. During a telephone conversation with Mark Passler on 9/10/2009 a provisional election was made without traverse to prosecute the invention of group 1, claims 1-5.

Affirmation of this election must be made by applicant in replying to this Office action.

Claims 6-10 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: **P in Figures 1,2 and 6**. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 1 and 3 rejected under 35 U.S.C. 102(b) as being anticipated by GOLANT et al. (US Pat. No. 4532155).

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7. **Regarding applicant's Claim 1**, GOLANT et al. discloses a fluidized bed granulation process comprising the steps: forming a fluid bed of granules to be coated using fluidification air flow (GOLANT et al. column 2 lines 30-35) at a predetermined rate, "air stream that is generated by a blower" (GOLANT et al. column 3 line 34); the granules are in the form of seeds, "beads of material" (GOLANT et al. column 3 line 25); feeding a continuous flow of growth substance, coating material, to the fluid bed (GOLANT et al. column 2 lines 35-36); inducing circulatory movement, vortex-shaped, of granules in the fluid bed through the fluidification air flow (GOLANT et al. column 2 lines 37-41); maintaining and regulating the circulatory movement through part of the fluidification air flow (GOLANT et al. column 5 lines 10-14); wherein the vortex-shaped circulatory movement has a substantially horizontal axis (GOLANT et al. column 4 lines 5-23). GOLANT et al. further discloses a manifold for dividing the fluidification air flow into a plurality of fractions having respective flow rates (GOLANT et al. column 5 lines 28-30). Friction losses result in a pressure gradient along manifolds that can cause uneven flow distribution from individual ports along the manifold (Roger Tim Huang, The practical handbook of compost engineering, pg. 511); therefore, GOLANT et al.'s respective flow rates are comprised between a minimum value flow rate, sufficient to support the fluid bed, fed at the first zone thereof, end of manifold, and a maximum value flow rate, fed in another zone of the same bed, beginning of manifold. GOLANT et al.'s manifold air distribution induces and maintains vortex-shaped circulatory movement, with a substantially horizontal axis, of the granules (GOLANT et al. column 4 lines 5-23).

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8. **Regarding applicant's Claim 3**, GOLANT et al. discloses a manifold for dividing the fluidification air flow into a plurality of fractions having respective flow rates (GOLANT et al. column 5 lines 28-30). Friction losses result in a pressure gradient along manifolds that cause uneven flow distribution from individual ports along the manifold (Roger Tim Huang, The practical handbook of compost engineering, pg. 511); therefore, the variation between ports of GOLANT et al.'s manifold air distribution system is gradual and continuous.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claim 2 is rejected under 35 USC 103 (a) as being obvious over GOLANT et al. (US Pat. No. 4532155) in view of WURSTER (US Pat. No. 2648609).

12. **Regarding applicant's Claim 2**, GOLANT et al. discloses a fluidized bed granulation process as discussed with respect to Claim 1. GOLANT et al. does not

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explicitly disclose that the variation in fluidification air flow between the first zone where the flow rate is minimum and the zone spaced out from it where the flow rate is maximum is of the steps type; however, WURSTER discloses injection of compressed air into the top and bottom of the fluidization chamber wherein the pressure injected at the top is greater than the pressure injected at the bottom (WURSTER column 3 lines 65). WURSTER further discloses that this pressure difference prevents the coating material from impinging the inner surface of the chamber (WURSTER column 3 lines 65-68). Air flow occurs only when there is a difference between pressures. Air will flow from a region of high pressure to one of low pressure-- the bigger the difference, the faster the flow (John Hopkins School of Medicine, *Air Flow*, Interactive Respiratory Physiology Website, 14 Sep. 2009). At the time of the invention, it would have been *prima facie* obvious to one of ordinary skill in the art to modify the plurality of fractions of air flow, taught by GOLANT et al., with the step wise flow difference, taught by WURSTER, in order to prevent the impingement of coating material onto the inner wall surface of the granulator.

13. Claim 4 and 5 is rejected under 35 USC 103 (a) as being obvious over GOLANT et al. (US Pat. No. 4532155) in view of MARSHALL (US Pat. No. 2561392).

14. **Regarding applicant's Claim 4 and 5**, GOLANT et al. discloses a fluidized bed granulation process as discussed with respect to Claim 1. GOLANT et al. does not explicitly disclose granules of the substance to be granulated are made to flow from one end of the fluid bed where a flow of seeds of said substance is continuously fed to an opposite end thereof where a flow of finished granulated product is continuously

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discharged with substantially helical movement or that the finished granulated product obtained in the fluid bed is continuously discharged from the fluid bed by gravity; however, MARSHALL discloses granules of the substance to be granulated are made to flow from one end of the fluid bed, the top, where a flow of seeds of said substance is continuously fed, by a hopper (MARSHALL column 5 lines 12-19), to an opposite end thereof, the bottom, where a flow of finished granulated product is continuously discharged with substantially helical movement, via a down feeder screw (MARSHALL column 5 lines 20-35). MARSHALL further discloses that the shells of solid material builds up on the particles until they become large enough to fall by gravity through the outlet to the down feeder screw (MARSHALL column 7 lines 45-50). Continuous production allows the most amount of product to be produced in the least amount of space and time (BusinessKnowledgeSource.com, *Continuous Production*, Manufacturing Info Website, 22 Sep 2009). At the time of the invention, it would have been *prima facie* obvious to modify GOLANT et al.'s batch process to include the continuous top feed and continuous bottom gravity discharge, taught by MARSHALL, in order to increase the rate of product production.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. HUTTLIN (US Pub. No. 2004/0013761) discloses a similar method for treating particulate material.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TABATHA PENNY whose telephone number is

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(571)270-5512. The examiner can normally be reached on Monday thru Friday 8:00am-4:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Barbara Gilliam can be reached on (571)272-1330. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/tp/

/Barbara L. Gilliam/
Supervisory Patent Examiner, Art Unit 4133